

Séminaire

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Conférencier invité

Vendredi 07 Déc. 2012

A 11h - Salle des séminaires de l'IBS

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AFM Imaging of Purified Transmembrane Proteins Reconstituted into Artificial Membranes

Atomic Force Microscopy is the only technique allowing proteins embedded into biological membranes to be imaged with a subnanometer resolution under physiological conditions. Therefore, in the difficult context of the structural analysis of membrane proteins, AFM represents a very attractive technique but requires the reconstitution of detergent-solubilized and purified membrane proteins within artificial membranes.

In this talk I will first introduce AFM and the most recent advances in the field and I will then focus on some technical developments allowing high resolution imaging of reconstituted membrane proteins using either their direct incorporation within supported lipid bilayers preformed on mica or the transfer of membrane patches obtained from two-dimensional crystallization trials performed at the air-water interface. Both techniques requires very small amount of purified proteins.

Hôte : J.M. Jault (IBS/Groupe M &P)